

Louisiana Department of Environmental Quality (LDEQ)
Office of Environmental Services

STATEMENT OF BASIS

Chalmette Refining, L.L.C.
Sulfur Recovery Unit, Hydrodesulfurization Unit, Amine Treating Unit, Sour Water
Stripper, Waste Gas System, Benzene Recovery Unit, Liquefied Petroleum Gas Recovery,
and Flares 1 & 2
Chalmette, St. Bernard Parish, Louisiana
Agency Interest Number: 1376
Activity Numbers: PER20070035 and PER20070036
Draft Permit Nos. 3016-V1 and 3023-V1

I. *APPLICANT:*

Company:

Chalmette Refining, L.L.C.
Post Office Box 1007
Chalmette, Louisiana 70044

Facility:

Chalmette Refining, L.L.C – Chalmette Refinery
Sulfur Recovery Unit, Hydrodesulfurization Unit, Amine Treating Unit, Sour Water
Stripper, Waste Gas System, Benzene Recovery Unit, Liquefied Petroleum Gas Recovery,
and Flares 1 & 2

500 W. St. Bernard Highway, Chalmette, St. Bernard Parish, Louisiana
Approximate UTM coordinates are 792.12 kilometers East and 3341.95 kilometers
North, Zone 15

Responsible Official:

Mr. Richard A. Igercich, Refinery Manager

II. *FACILITY AND CURRENT PERMIT STATUS*

Chalmette Refinery, L.L.C. (CRLLC) operates an oil refinery in Chalmette, Louisiana, in St. Bernard Parish. St. Bernard Parish is currently designated as attainment for all regulated air pollutants. The Utilities Plant are a major source subject to the Part 70 operating permit program because it is part of a stationary source that has the potential to emit over the major source emissions levels for criteria pollutants. In addition, this stationary source has the potential to emit 25 or more tons per year of aggregate TAPs.

The Chalmette Refinery is bordered by the Mississippi River to the south, Calciner Industries, Inc. and old Kaiser Aluminum Company to the west, St. Bernard Highway with light commercial and residential areas to the north and Palmisano Street with light commercial and residential areas to the east. Chalmette Refinery is a joint venture between ExxonMobil Corporation and Petroleos de Venezuela (PDV), the Venezuelan national oil company. The refinery is an integrated crude operation (high conversion) which includes crude distillation, catalytic reforming, fluid catalytic cracking (FCC), hydrocracking, HF alkylation, delayed coking, and aromatics processing units. The refinery's product capabilities include gasoline, diesel, benzene/toluene/xylene (BTX) production, distillates, and sulfur recovery as well as by-products such as petroleum coke and LPG.

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The process units that exist at the Chalmette Refinery site include Oil Movements and Loading; Utilities Plant; Waste Water Treatment Plant; No. 1 Crude/Coker; No. 2 Crude/Coker; Cat Feed Hydrotreater/Pretreater No. 1/Reformer No. 1/Gasoline Hydrotreater Unit; Sulfur Recovery Unit/HDS/AMU/SWS/WGS/BRU; Flare No.1 & Flare No. 2; Hydrocracker Unit/Pretreater No. 3/Reformer No. 3/LEP; Fluidized Catalytic Cracking Unit/Alkylation; and Aromatics.

Currently the Sulfur Recovery Unit (SRU), Hydrodesulfurization Unit, Amine Treating Unit, Sour Water Stripper, Waste Gas System, Benzene Recovery Unit and Liquefied Petroleum Gas Recovery are operated under a Part 70 Permit No. 3023-V0 dated January 30, 2007.

The Sulfur Recovery Unit removes sulfur compounds and produces molten sulfur from the streams received by the unit from Sour Water Stripper and Amine Treating Unit.

The Hydrodesulfurization Unit removes sulfur and other impurities to produce a finished diesel product. It receives feed streams from several sources: Crude Unit No. 1 and 2, Coker Unit No. 1 and 2, Hydrocracker Unit, Fluidized Catalytic Cracking Unit (FCCU) and several tanks.

Amine Treating Unit& Alkylation Unit removes hydrogen sulfide and carbon dioxide by absorption in diglycolamine (DGA). It processes feed streams from several sources: Hydrodesulfurization Unit, Cat Feed Hydrotreater, Light Ends Pretreater, Pretreater No. 3, Reformer No. 1, Hydrocracking Unit, Waste Gas System, Gasoline Hydrotreater Unit, FCCU, and Coker No. 1 and 2.

Waste Gas System collects low pressure waste gas stream in the refinery and increases the pressure of the gases and sends them to the Amine Treating Unit.

Benzene Recovery Unit removes gas and liquid hydrocarbons, including benzene from the process water from a number of units at the refinery.

Liquid Petroleum Gas Recovery produces a fuel gas stream which is used in the refinery fuel gas system and recovers light petroleum gas.

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Office of Environmental Services

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The No. 1 & 2 Flares are operated under a Part 70 Permit No. 3016-V0 dated January 30, 2007.

Flare No. 1 – The Flare No. 1 system consists of the main flare collection headers, the flare gas recovery compressors (electric motor driven), the flare knockout drums, and the staged flare burners (candelabra style). A small refinery fuel gas purge is used to maintain a positive pressure in the flare header. The flare also uses refinery fuel gas to operate the pilots. The header system collects process gases from the coker units as well as both sweet and sour process streams from refinery units. The collected gases are routed to the flare gas recovery compressors for pressurization and recycle to the Amine Unit in order to remove sulfur compounds and use them as refinery fuel gas. The No. 1 Flare continually burns only pilot and purge gases per 40 CFR 60.104(a)(1) which are exempt. The No. 1 Flare is used as an emergency flare for the refinery.

No. 2 Flare – The Flare No. 2 system consists of the main flare collection headers, the flare knockout drums and the single flare burner (pencil style). A small refinery fuel gas purge is used to maintain a positive pressure in the flare header. The flare also uses refinery fuel gas to operate the pilots. The No. 2 Flare header system collects sweet process gas streams from units; sour process gas streams are routed to No. 1 Flare as part of the Flare Gas Management Project. The No. 2 Flare will operate as an NSPS Subpart J compliant Fuel Gas Combustion Device. The flare is equipped with a CEM analyzer to monitor hydrogen sulfide content of the gases entering the flare.

Flare Gas Management Project – This project which was approved under an “Authorization to Construct/Approval to Operate” dated July 28, 2004, is operational.

The facility is modifying the permit, Permit No. 3023-V0 to incorporate the Optimization Study which was conducted as per the requirements of U.S. EPA Consent Decree No. 05-4662 B(i) an NSR Global Settlement. The facility also proposes to incorporate No. 1 & 2 Flares startup/shutdown (SU/SD) emissions, Flare Gas Management SU/SD emissions, under the Consent Decree requirements of “Good Air Pollution Control Practices” for No. 1 & 2 Flares, and miscellaneous flaring operations in Permit No. 3016-V0.

Louisiana Department of Environmental Quality (LDEQ)
Office of Environmental Services

STATEMENT OF BASIS

Chalmette Refining, L.L.C.
 Sulfur Recovery Unit, Hydrodesulfurization Unit, Amine Treating Unit, Sour Water
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 Agency Interest Number: 1376
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The entire facility is operating under several Part 70 permits as shown below:

Permit #	Units or Sources	Date Issued
2500-00005-V1	Utilities Plant	10/29/2007
2822-V1	Wastewater Treatment Plant	4/11/2007
3004-V0	Oil Movements & Loading	1/30/2007
3015-V0	HCU, PR3, RF3, LEP	1/30/2007
3016-V0	Flare No. 1 & 2	1/30/2007
3017-V0	Aromatics	1/30/2007
2933-V0	Crude 2/Coker 2	3/14/2006
3011-V0	CFHT, PR1, RF1, GHT	1/30/2007
3018-V0	Crude 1/Coker 1	1/30/2007
3023-V0	SRU	1/30/2007
3022-V1	FCCU & Alky	12/11/2007

III. PROPOSED PERMIT / PROJECT INFORMATION

Proposed Permit

Applications and Emission Inventory Questionnaires (EIQ), were submitted by Chalmette Refining, L.L.C on December 26, 2007 for modification to Part 70 Permit Nos. 3016-V0 and 3023-V0. Additional information as of March 1, 2008 was also received.

Project description

Chalmette Refining, L.L.C proposes to modify the Part 70 Operating Permit No. 3023-V0. The proposed modifications are as follows:

1. Update emission calculation methodologies based on revised factors per stack tests and operating conditions;
2. Incorporate the provisions based on the installation of a catalytic converter (control device) approved under an Authorization to Construct/Approval to Operate dated November 20, 2006 on the Waste Gas Compressor K-406 and emissions changes for Waste Gas Compressors (K-400, 401, and 402) based on recent performance tests and current operation of WGS;
3. Revise Sulfur Recovery Unit (SRU) Thox (F-8003/8053, Emission Point 46) emissions based on the results of Optimization Study as per the Consent Decree;
4. Revise emissions based on duty for the HDS Stripper Reboiler Heater F-3301 due to extended time between reactor catalyst change outs;

Louisiana Department of Environmental Quality (LDEQ)

Office of Environmental Services

STATEMENT OF BASIS

Chalmette Refining, L.L.C.
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Stripper, Waste Gas System, Benzene Recovery Unit, Liquefied Petroleum Gas Recovery,
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Chalmette, St. Bernard Parish, Louisiana
Agency Interest Number: 1376
Activity Numbers: PER20070035 and PER20070036
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5. Revise the maximum hour emission limit for PM₁₀ and VOC by adding 5% contingency for the combustion units in general;
6. Revise current tanks throughput and emissions based on the recent operations study;
7. Revise the fugitive emissions based on the updated fugitive count and the current Leak Detection and Repair (LDAR) program;
8. Incorporate the Consent Decree requirements for the SRU; Sulfur Pit Gas Recovery Project under progress;
9. Update the Insignificant Activities List based on the control measures for catalyst loading and tanks based on the recent audit; and
10. Update the regulatory requirements as appropriate.

The change in emissions from the SRU based on the Optimization Study, Post SPGR Project, and the calculation methodology is as follows:

<u>Pollutant</u>	<u>Before*</u>	<u>After</u>	<u>Change</u>
PM ₁₀	1.63	1.84	+ 0.21
SO ₂	58.75	65.73	+ 6.98
NO _x	55.77	60.04	+ 4.27
CO	203.73	328.97	+ 125.24
VOC	0.13	0.16	+ 0.03

* Permitted emissions are being used as the Part 70 permit was issued in January 2007 which included the ULSD and SPGR Projects.

The facility conducted an Optimization Study on the SRU Thox as per the requirements of U.S. EPA Consent Decree No. 05-4662 B(i), a New Source Review (NSR) Global Settlement between U.S. EPA and State of Louisiana versus Chalmette Refining, L.L.C. filed on April 26, 2006. The study included 1) a detailed evaluation of the Sulfur Recovery Plant design, capacity, operating parameters and efficiency including catalytic activity and material balance; 2) a thorough review of each critical piece of process equipment and instrumentation within the Claus Trains; 3) establishment of baseline data through testing and measurement of key parameters through out the Claus Trains; 4) establishment of the thermodynamics process model of the Claus trains; and 5) verification through testing and analysis of CEMs data.

Louisiana Department of Environmental Quality (LDEQ)

Office of Environmental Services

STATEMENT OF BASIS

Chalmette Refining, L.L.C.
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Chalmette, St. Bernard Parish, Louisiana
Agency Interest Number: 1376
Activity Numbers: PER20070035 and PER20070036
Draft Permit Nos. 3016-V1 and 3023-V1

During the Optimization Study it was determined that the criteria pollutant emissions from the SRU Thox (F-8003/8053, Emission Point 46) were higher than previously calculated. There was no modification (new equipment or change in the method of operation) undertaken at the SRU Thox. These changes were due to revised calculations (actual operating temperature higher than the estimated temperature) and do not result in actual emissions increase to the atmosphere. Therefore, PSD review is not required. The National Ambient Air Quality Standards (NAAQS) will not be exceeded due to the higher emission numbers from the Optimization Study, because the previous modeling was conducted under the Administrative Order of Consent (AOC) which had higher emissions limits than the current permitted emissions. Also, there is no change in the existing Best Available Control Technology (BACT) analysis. The facility is incorporating these emission changes due to the Optimization Study into Permit No. 3023-V1.

Total permitted emissions from the SRU, HDS, AMU, SWS, WGS, BRU and LPG based on the current operating conditions which reflect the updated emission factors and the above referenced changes in tons per year are as follows:

<u>Pollutant</u>	<u>Before</u>	<u>After</u>	<u>Change</u>
PM ₁₀	6.48	6.61	+ 0.13
SO ₂	66.43	74.21	+ 7.78
NO _x	235.23	168.09	- 67.14
CO	385.82	410.41	+ 24.59
VOC	258.70	147.20	- 111.50

The SU/SD emissions from No. 1 & 2 Flares are part of operating stationary sources and should be regulated and appropriately controlled. Many rules and regulations acknowledge and recognize that SU/SD emissions are exempt from certain technology based limitations and must be controlled with good air pollution control practices to minimize these emissions during such periods. Regulations like 40 CFR 60.8(c), 40 CFR 63.6(e), 40 CFR 63.10(e)(3)(ii) do give a general guidance for controlling and minimizing the SU/SD emissions. Permitting SU/SD emissions will be beneficial to air quality and will greatly assist in air quality planning purposes by requiring that SU/SD emissions be clearly identified, quantified, and limited where necessary through out the facility. The SU/SD emissions are not subject to New Source Review as they are existing emissions and no modifications (new source or change in the method of operation) to the facility are being undertaken at this time.

Louisiana Department of Environmental Quality (LDEQ)

Office of Environmental Services

STATEMENT OF BASIS

Chalmette Refining, L.L.C.
Sulfur Recovery Unit, Hydrodesulfurization Unit, Amine Treating Unit, Sour Water
Stripper, Waste Gas System, Benzene Recovery Unit, Liquefied Petroleum Gas Recovery,
and Flares 1 & 2
Chalmette, St. Bernard Parish, Louisiana
Agency Interest Number: 1376
Activity Numbers: PER20070035 and PER20070036
Draft Permit Nos. 3016-V1 and 3023-V1

The SU/SD activities, when the excess refinery fuel gas is routed to the No. 1 Flare, are separated into the following categories: a) ALKY Unit shutdown during which large amount of process gas in excess of the Flare Gas Management capacity; b) Flare Gas Management maintenance when any one of the three compressors is shut down for repairs; c) When the complete Flare Gas Management system (all three compressors) is shutdown for cleanup and repairs; and d) When safety relief valves are opened for maintenance and safety reasons to balance pressure. No. 2 Flare includes emissions due its startup/shutdown. A specific condition has been added for monitoring, recordkeeping and limiting SU/SD emissions from No 1 & 2 Flares to show compliance.

In addition, the following revisions will also be undertaken at the facility to modify Permit No. 3016-V0:

1. Fugitive emissions based on the audited current component counts and calculation methodology;
2. No. 1 & 2 Flare emissions change due to the construction of Flare Gas Management Project and updated emission factors;
3. VOC speciation based on updated calculation methodology; and
4. Insignificant Activity list based on recent audit of the units.

Permitted emissions and changes due to the above referenced incorporations and revisions from the No. 1 and 2 Flares in tons per year are as follows:

<u>Pollutant</u>	<u>Before</u>	<u>After</u>	<u>Change</u>
PM ₁₀	11.98	13.70	+ 1.72
SO ₂	52.73	36.44	- 16.29
NO _x	40.32	46.11	+ 5.79
CO	219.38	250.88	+ 31.50
VOC	107.38	101.98	- 5.40

IV. *REGULATORY ANALYSIS*

The applicability of the appropriate regulations is straightforward and is provided in the Facility Specific Requirements Section of the proposed permit. Similarly, the Monitoring, Reporting and Recordkeeping necessary to demonstrate compliance with the applicable terms conditions and standards are provided in the Facility Specific Requirements Section of the proposed permit.

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Office of Environmental Services**

STATEMENT OF BASIS

Chalmette Refining, L.L.C.
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Chalmette, St. Bernard Parish, Louisiana
Agency Interest Number: 1376
Activity Numbers: PER20070035 and PER20070036
Draft Permit Nos. 3016-V1 and 3023-V1

**National Emission Standards for Hazardous Air Pollutants: NESHAP From
Benzene Waste Operations (BWON)**

Chemical manufacturing plants, coke by-product plant and petroleum refineries are potentially subject to the provisions of BWON. Oil water separators, individual drain systems, stream stripping units, and other equipment that meet the definition of a waste management unit are subject to BWON. A waste management unit is defined as a piece of equipment used in the handling, storage, treatment, or disposal of waste. A waste is any material resulting from industrial operations that is discarded or accumulated, stored, or treated prior to discarded, recycled, or discharged. BWON specifically lists the following waste streams to which this regulation do not apply: 1) Waste in the form of gases or vapors that is emitted from process fluids; 2) Waste that is contained in a segregated storm water sewer system; and 3) Any gaseous stream from a waste management unit, treatment process, or wastewater treatment system routed to a fuel gas system.

The facility generates a total annual benzene (TAB) quantity of 10 megagrams per year or greater. The facility elects to take the 6 megagrams per year option as per the requirements of 40 CFR 63.342(e) where the total uncontrolled benzene quantity for the wastes shall not be greater than 6 megagrams per year.

**National Emission Standards for Hazardous Air Pollutants: NESHAP From
Synthetic Organic Chemical Manufacturing Industry**

A chemical manufacturing process unit (CMPU) that manufactured one or more SOCMI chemicals listed in Table 1 of 40 CFR 63, Subpart F and that uses as a reactant or manufactures as a product, or co-product, one or more of the organic hazardous air pollutants listed in Table 2 of 40 CFR 63, Subpart F is potentially subject to the SOCMI HON. Some of the Chemical Manufacturing Process Units (CMPUs), located elsewhere in the refinery, may generate maintenance wastewater and Group 2 process wastewater and route it to the WWTP. Therefore, the WWTP is subject to Subpart F Maintenance Wastewater requirements and Subpart G Group 2 Process Wastewater requirements.

**National Emission Standards for Hazardous Air Pollutants: NESHAP From
Petroleum Refineries**

A petroleum refining process unit that contains or contacts one or more of the HAPs listed in Table 1 of Subpart CC is potentially subject to RMACT.

There are fugitive components within the CFHT-PT1-RF1-GHU units in organic HAP service. Therefore, the units are subject to the equipment leak provisions of this rule and CRLLC demonstrates compliance by complying with the provisions of 40 CFR

**Louisiana Department of Environmental Quality (LDEQ)
Office of Environmental Services**

STATEMENT OF BASIS

Chalmette Refining, L.L.C.
Sulfur Recovery Unit, Hydrodesulfurization Unit, Amine Treating Unit, Sour Water
Stripper, Waste Gas System, Benzene Recovery Unit, Liquefied Petroleum Gas Recovery,
and Flares 1 & 2
Chalmette, St. Bernard Parish, Louisiana
Agency Interest Number: 1376
Activity Numbers: PER20070035 and PER20070036
Draft Permit Nos. 3016-V1 and 3023-V1

63.648(c), the modified HON option.

A process wastewater stream in a refining process unit that contains one or more of the HAPs listed in Table 1 of Subpart CC are potentially subject to RMACT. Wastewater components within the process units are associated with petroleum refining process units. Therefore, the wastewater provisions of the RMACT are applicable. Group 2 streams are not subject to any control, monitoring, recordkeeping, or reporting requirements under RMACT. Group 1 wastewater streams must demonstrate compliance with RMACT by complying with NESHAP Part 61 Subpart FF, BWON.

The CFHT-PT1-RF1-GHU units contain tanks that receive maintenance wastewater and wastewater streams that are subject to the wastewater provisions of RMACT. When determining whether a tank must comply with the storage vessel provisions or the wastewater provisions of the RMACT, the function of the tank (whether the tank stores a waste or a product for use or reuse) is used as the basis of the determination. As defined in RMACT Subpart CC, a wastewater tank is not a storage vessel. Notably, the CFHT-PT1-RF1-GHU units contain Group 2 wastewater tanks. Group 2 wastewater tanks are not subject to any control, monitoring, recordkeeping, or reporting requirements under RMACT.

The No. 1 Crude Unit contains tanks that receive maintenance wastewater and wastewater streams that are subject to the wastewater provisions of RMACT. When determining whether a tank must comply with the storage vessel provisions or the wastewater provisions of the RMACT, the function of the tank (whether the tank stores a waste or a product for use or reuse) is used as the basis of the determination. As defined in RMACT Subpart CC, a wastewater tank is not a storage vessel. Notably, the No. 1 Coker Unit contains Group 2 wastewater tanks. Group 2 wastewater tanks are not subject to any control, monitoring, recordkeeping, or reporting requirements under RMACT.

National Emission Standards for Hazardous Air Pollutants: NESHAP From Synthetic Organic Chemical Manufacturing Industry

The petroleum refining process unit that contains or contacts one or more of the HAPs listed in Table 1 of Subpart CC is potentially subject to RMACT. Leaks from equipment in organic HAP service that are located in a petroleum refining process unit are subject to RMACT. Equipment in organic HAP service in the WWTP Area is subject to the RMACT. CRLLC demonstrates compliance with this rule by complying with the provisions of 40 CFR 63.648. A process wastewater stream in a petroleum refining process unit that contains one or more of the HAPs listed in Table 1 of Subpart CC are potentially subject to RMACT. The WWTP receives process wastewater streams and,

Louisiana Department of Environmental Quality (LDEQ)
Office of Environmental Services

STATEMENT OF BASIS

Chalmette Refining, L.L.C.
Sulfur Recovery Unit, Hydrodesulfurization Unit, Amine Treating Unit, Sour Water
Stripper, Waste Gas System, Benzene Recovery Unit, Liquefied Petroleum Gas Recovery,
and Flares 1 & 2
Chalmette, St. Bernard Parish, Louisiana
Agency Interest Number: 1376
Activity Numbers: PER20070035 and PER20070036
Draft Permit Nos. 3016-V1 and 3023-V1

therefore, the wastewater provisions of the RMACT are applicable to the WWTP Area.

Notably, the benzene concentration of the wastewater streams generated in the WWTP Areas is less than 10 ppmw. Therefore, the wastewater stream can be classified as a Group 2 stream. There are no controls, monitoring, recordkeeping, or reporting requirements for Group 2 wastewater streams. However, the Vacuum Trucks within the WWTP may load and transport process wastewater streams from refinery units that can be classified as Group 1 streams. Per 40 CFR 63.647(a), Group 1 wastewater streams must demonstrate compliance with RMACT by complying with NESHAP Part 61 Subpart FF, BWON.

The WWTP area contains tanks that receive maintenance wastewater and wastewater streams that are subject to the wastewater provisions of RMACT. When determining whether a tank must comply with the storage vessel provisions or the wastewater provisions of the RMACT, the function of the tank (whether the tank stores a waste or a product for use or reuse) is used as the basis of the determination. As defined in RMACT Subpart CC, a wastewater tank is not a storage vessel. Notable, the WWTP area contains Group 2 wastewater tanks. Group 2 wastewater tanks are not subject to any requirements under RMACT.

The equipment leak provisions of Subpart CC apply to all equipment that operates in organic HAP service. Equipment includes all pumps, compressors, pressure relief devices, sampling connections, open-ended valves or lines, valves, flanges and other connectors, product accumulator vessels, and control devices, or systems required by Subpart CC. However, there are no fugitive components within the WWTP Area in organic HAP service. Therefore, the WWTP Area is not subject to the equipment leak provisions of this rule.

Prevention of Significant Deterioration Applicability

The projects undertaken under the two permits, Permit No. 3023-V0 and 3016-V0 are independent of each other and warrant a separate review on their merits in accordance with the PSD regulations.

Permit No. 3023-V1

Prevention of Significant Deterioration (PSD) review is not required as the changes are not related to any new equipment or change in method of operation. However, the last modeling was performed with the interim emission limits approved under an

Louisiana Department of Environmental Quality (LDEQ)
Office of Environmental Services

STATEMENT OF BASIS

Chalmette Refining, L.L.C.
 Sulfur Recovery Unit, Hydrodesulfurization Unit, Amine Treating Unit, Sour Water
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 Agency Interest Number: 1376
 Activity Numbers: PER20070035 and PER20070036
 Draft Permit Nos. 3016-V1 and 3023-V1

Administrative Order of Compliance dated May 24, 2005, which are greater than the current permitted emissions. The facility conducted air screening for NO_x and CO emissions; it was determined that NAAQS did not exceed as shown below.

Permit No. 3016-V1

The SU/SD emissions are existing emissions which are now being recognized as a separate source of emissions in order to clearly identify, quantify, and limit them where necessary through out the facility. PSD review is not required as there is no change in method of operations or modification. A specific condition has been added to limit SU/SD emissions along with monitoring and recordkeeping requirements to show compliance.

Air Modeling Analysis

Updated air screening was conducted on the current permitted emissions though the previous air modeling was done based on the intermittent emission limits for the facility which were greater than the current permitted emissions. The current PSD Permit No. PSD-LA-166(M-6) has been modified to reflect the current changes. The table below shows the comparison between modeled current permitted emissions limits with the amended Administrative Order of Consent (AOC) emission limits for the facility in tons per year:

<u>Pollutant</u>	<u>AOC Limits</u>	<u>Initial Permit Limits (V0)</u>	<u>Modeled Current Permitted Limits</u>	<u>Flare No. 1 & 2 SU/SD Emissions</u>
PM ₁₀	307.30	241.10	230.79	7.52
SO ₂	2817.20	509.50	506.79	1307.61
NO _x	4229.09	3205.60	2631.46	25.29
CO	2640.10	2053.60	2424.63	137.61
VOC	4756.10	4127.40	2775.77	40.41

Note: Current permitted limits include all the interim updates, other changes if any and the changes proposed in the Optimization Study and the inclusion of SU/SD emissions

Louisiana Department of Environmental Quality (LDEQ)
Office of Environmental Services

STATEMENT OF BASIS

Chalmette Refining, L.L.C.
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 Stripper, Waste Gas System, Benzene Recovery Unit, Liquefied Petroleum Gas Recovery,
 and Flares 1 & 2
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 Agency Interest Number: 1376
 Activity Numbers: PER20070035 and PER20070036
 Draft Permit Nos. 3016-V1 and 3023-V1

The sum of modeled current permitted emissions limits and the Flare No. 1 & 2 SU/SD emissions (yearly maximum) is lower than the AOC permitted limits. The facility conducted Dispersion modeling and the results are shown in the table below:

Pollutant	Average Period	Concentration (ug/m ³)			
		Modeled Impact	Background	Total	NAAQS
NO ₂	Annual	28.7	16.9	45.6	100
CO	1-Hour	11,876	4,164	16,040	40,000
	8-Hour	3,584	2,528	6,112	10,000

Comprehensive Toxic Air Pollutant Control Program-Chapter 51

Toxic air pollutant emissions from fugitives must be controlled to a degree that constitutes MACT. The units comply with all applicable provisions of the Louisiana Air Toxics Program (LAC 33:III.Chapter 51) which includes the LA Refinery MACT Determination dated July 26, 1994. The LA Refinery MACT and other associated requirements have been incorporated in all the corresponding permits issued to the facility.

Maximum Achievable Control Technology (MACT) requirements

The Louisiana Air Toxics Program (LA MACT) requires a major source emitting any Class I or II pollutant at a rate that exceeds the minimum emission rate for that pollutant to demonstrate compliance with the Maximum Achievable Control Technology (MACT) standards. Additionally, the Louisiana Air Toxics Program requires a major source emitting any Class I, II, or III toxic air pollutant greater than the minimum emission rate for that pollutant to determine its status of compliance with the applicable ambient air standard (AAS) defined for the pollutant.

The requirements of the LA Refinery MACT apply to the storage tanks and to the units as a whole. Chalmette Refining demonstrates compliance with the LA Refinery MACT requirements and with the most stringent applicable federal or state air toxics regulations.

General Condition XVII Activities

The facility will comply with the applicable General Condition XVII Activities emissions

Louisiana Department of Environmental Quality (LDEQ)
Office of Environmental Services

STATEMENT OF BASIS

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Sulfur Recovery Unit, Hydrodesulfurization Unit, Amine Treating Unit, Sour Water
Stripper, Waste Gas System, Benzene Recovery Unit, Liquefied Petroleum Gas Recovery,
and Flares 1 & 2
Chalmette, St. Bernard Parish, Louisiana
Agency Interest Number: 1376
Activity Numbers: PER20070035 and PER20070036
Draft Permit Nos. 3016-V1 and 3023-V1

as required by the operating permit rule. However, General Condition XVII Activities are not subject to testing, monitoring, reporting or recordkeeping requirements. For a list of approved General Condition XVII Activities, refer to Section VIII of the proposed Part 70 permits.

Insignificant Activities

All Insignificant Activities are authorized under LAC 33:III.501.B.5. For a list of approved Insignificant Activities, refer to Section IX of the proposed Part 70 permits.

V. *PERMIT SHIELDS*

Permit shield was not requested.

VI. *PERIODIC MONITORING*

The Monitoring, Reporting and Recordkeeping necessary to demonstrate compliance with the applicable terms, conditions and standards are provided in the Facility Specific Requirements Section of the proposed permits, Permit Nos. 3016-V1 and 3023-V1.

VII. *APPLICABILITY AND EXEMPTIONS OF SELECTED SUBJECT ITEMS*

See Proposed Permits.

VIII. *STREAMLINED REQUIREMENTS*

These proposed permits do not include any streamlined requirements.

Louisiana Department of Environmental Quality (LDEQ)
Office of Environmental Services

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IX. GLOSSARY

Carbon Monoxide (CO) – A colorless, odorless gas which is an oxide of carbon.

Maximum Achievable Control Technology (MACT) - The maximum degree of reduction in emissions of each air pollutant subject to LAC 33:III.Chapter 51 (including a prohibition on such emissions, where achievable) that the administrative authority, upon review of submitted MACT compliance plans and other relevant information and taking into consideration the cost of achieving such emission reduction, as well as any non-air-quality health and environmental impacts and energy requirements, determines is achievable through application of measures, processes, methods, systems, or techniques.

New Source Review (NSR) - A preconstruction review and permitting program applicable to new or modified major stationary sources of air pollutants regulated under the Clean Air Act (CAA). NSR is required by Parts C ("Prevention of Significant Deterioration of Air Quality") and D ("Nonattainment New Source Review").

Nitrogen Oxides (NO_x) - Compounds whose molecules consists of nitrogen and oxygen.

Organic Compound - Any compound of carbon and another element. Examples: Methane (CH₄), Ethane (C₂H₆), Carbon Disulfide (CS₂)

Part 70 Operating Permit- Also referred to as a Title V permit, required for major sources as defined in 40 CFR 70 and LAC 33:III.507. Major sources include, but are not limited to, sources which have the potential to emit: ≥ 10 tons per year of any toxic air pollutant; ≥ 25 tons of total toxic air pollutants; and ≥ 100 tons per year of regulated pollutants (unless regulated solely under 112(r) of the Clean Air Act) (25 tons per year for sources in non-attainment parishes).

PM₁₀- Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers as measured by the method in Title 40, Code of Federal Regulations, Part 50, Appendix J.

Potential to Emit (PTE) - The maximum capacity of a stationary source to emit any air pollutant under its physical and operational design.

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Prevention of Significant Deterioration (PSD) – A New Source Review permitting program for major sources in geographic areas that meet the National Ambient Air Quality Standards (NAAQS) at 40 CFR Part 50. PSD requirements are designed to ensure that the air quality in attainment areas will not degrade.

RMACT – Refinery Maximum Achievable Control Technology

Sulfur Dioxide (SO₂) – An oxide of sulfur.

Title V permit – See Part 70 Operating Permit.

Volatile Organic Compound (VOC) - Any organic compound which participates in atmospheric photochemical reactions; that is, any organic compound other than those which the administrator of the U.S. Environmental Protection Agency designates as having negligible photochemical reactivity.